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Post-Conditioning for ST-Segment Elevation Myocardial Infarction

I read with interest the paper by Thuny et al. (1) published in the June 12, 2012, issue of the *Journal*. The authors adequately demonstrated the effectiveness of a post-conditioning strategy in decreasing the degree of myocardial edema as assessed by cardiac magnetic resonance and hypothesized how this can be the result of decrease in infarct size.

Post-conditioning is, of course, in early stages of development, and clinical implications remain to be established as clearly pointed out by the authors; the findings of this randomized trial make post-conditioning a very promising strategy for the ongoing improvement of outcomes in the management of ST-segment elevation myocardial infarction. As such, I am interested to learn whether the 26 patients not included in the analysis were evenly distributed between control/intervention groups, because this information can potentially affect the final interpretation of the results.

As post-conditioning transitions to becoming a clinically useful management strategy for ST-segment elevation myocardial infarction, data with regard to the safety of the intervention should be included in future research. Consequently, and given the potential role this paper can play in the design of future larger phase 3 clinical trials, I would appreciate if the authors could provide additional information on this issue.

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Reply

We thank Dr. Posada for his comments with regard to our recently published report (1). In this study, we analyzed the effect of post-conditioning on myocardial edema and infarct size. Patients with previous myocardial infarction in the same territory, a Thrombolysis In Myocardial Infarction flow grade >1, and evidence of coronary collaterals to the area at risk were excluded, to limit the influence of confounding factors. In Figure 1, we present additional information with regard to the distribution of the excluded patients according to the treatment allocation. Five control versus 7 post-conditioned patients were not included, due to absence or poor

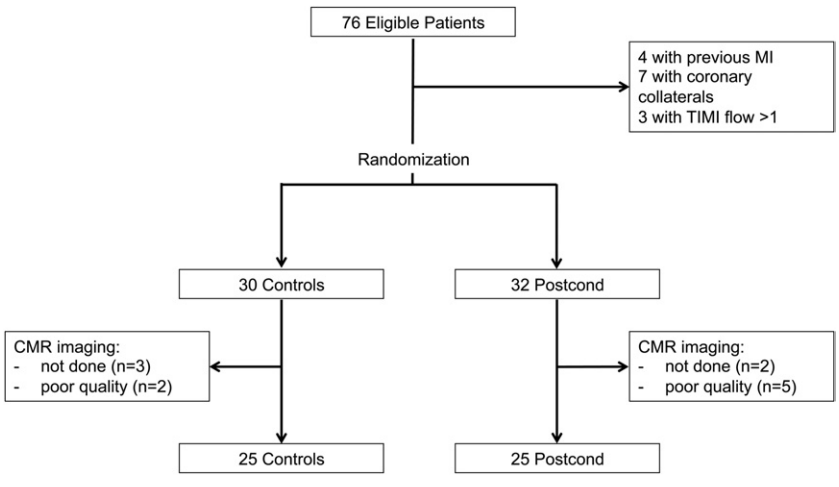

Figure 1 Study Enrollment and Randomization

Distribution of the excluded patients according to the treatment allocation. CMR = cardiac magnetic resonance; MI = myocardial infarction; Postcond = post-conditioning; TIMI = Thrombolysis In Myocardial Infarction.